

REMARKS

Applicants would like to thank the Examiner for the careful consideration given the present application. The application has been reviewed in light of the Office action, and amended to more clearly and particularly describe and claim the subject matter that Applicants regard as embodiments of the invention. In particular, claims 1, 13, 20-24, 26-30, and 32-40 have been amended through this Response. Claims 5, 11, 25, and 31 have been withdrawn. Reconsideration and allowance of the application and pending claims 1-4, 6-10, 12-24, 26-30, and 32-40 are respectfully requested.

I. Specification Amendments

Various amendments have been made to the specification through this Response to correct typographical and grammatical errors and to provide a correct and accurate description of embodiments of Applicants' invention as originally disclosed. Although these amendments effect several changes to the specification, it is respectfully submitted that no new matter has been added.

II. Election/Restriction

The Office action of 11/29/2006 states that "claims 4, 10, and 32 of Species A and claims 12 and 32 of Species B" were elected in the reply filed on 09/08/2006. Applicants respectfully note that claims 4, 10 and 24 of Species A and claims 12 and 32 of Species B were elected in the reply filed on 09/05/2006.

Additionally, the Office action also states that claims 5, 12, 25, and 31 are withdrawn from consideration. However, Applicants respectfully submit that claims 5, 11, 25, and 31 should be withdrawn from consideration based on the 09/05/2006 restriction election.

III. Priority

Applicants are not addressing the validity of all assertions made in the Office Action regarding the priority of this Application. Therefore, Applicants should not be presumed to agree with any statements made in the Office Action regarding the priority of the Application unless otherwise specifically indicated by Applicants.

IV. Information Disclosure Statement

The Examiner has lined-through several references of the IDS filed 06/24/2003 because they allegedly do not contain publication dates (Office action, 11/29/2006, page 2), and hence the IDS filed on 6/24/2003 was only partially considered. Applicants respectfully note that 37 C.F.R. 1.98 requires that each "publication listed in an information disclosure statement must be identified by publisher, author (if any), title, relevant pages of the publication, date, and place of publication." Applicants respectfully note that each of the publications lined through are indeed identified by the requisite information. Further, Applicants are unaware of any provision of 37 C.F.R. 1.97 or 1.98 that requires the information to be duplicated in PTO form 1449. Accordingly, Applicants respectfully submit that the references should have been considered. However, in the interest of expediting prosecution on the merits, and as a courtesy to the Examiner, Applicants have submitted PTO form 1449 as part of this Response with a listing of the three lined-through publications, the date of publication, and other information listed on the form, as well as copies of the publications, as previously set forth in the submission of 6/24/2003.

V. Rejections under 35 U.S.C. § 101 and §112, first paragraph

The Office action alleges that claims 1-4, 6-11, 13-24, 26-30, and 32-40 are rejected under 35 U.S.C. 101 "because the claimed invention is directed to non-statutory matter" (Office action, 11/29/2006, page 3) and "because the claimed invention is not supported by either a specific, substantial asserted utility or a well established utility" (Office action, 11/29/2006, page 4). The Office Action also alleges that claims 1-4, 6-11, 13-24, 26-30, and 32-40 are rejected under 35 U.S.C. 112, first paragraph, "since the claimed invention is not supported by either a specific, substantial asserted utility or a well established utility" (Office action, 11/29/2006, page 5).

Through this response, Applicants have amended claims 1, 20-21, and 40 to clarify that a concrete, tangible, and useful result is provided to a user as claimed. Additionally, Applicants have amended claims 21-24, 26-30, and 32-41 to clarify that the subject matter is indeed directed to statutory subject matter, and in particular, through entry of amendments directed to a program that is embodied in a computer-readable medium. Accordingly, Applicants respectfully submit that claims 1-4, 6-10, 12-24, 26-30, and 32-40 satisfy sections 101 for statutory subject matter, and hence Applicants respectfully request that the rejection to claims 1-4, 6-11, 13-24, 26-30, and 32-40 be withdrawn.

With regard to the asserted 112 rejection, Applicants respectfully submit that the specification discloses an embodiment of an ion identification and filter processing 24 on pages 19-26 and flowchart of Figure 10. It is respectfully submitted that the ion identification and filter processing 24 is described in such a way that one skilled in the art would know how to use the invention. Therefore, Applicants' respectfully submit that the subject matter of claims 1-4, 6-10, 12-24, 26-30, and 32-40 is supported by specific, substantial asserted utility as taught in the specification, and hence respectfully request

that the rejection under 35 U.S.C. § 112, first paragraph to claims 1-4, 6-10, 12-24, 26-30, and 32-40 be withdrawn.

VI. Rejections under 35 U.S.C. §112, second paragraph

The Office action alleges that claims 1, 20, and 21 are rejected under 35 U.S.C. 112, second paragraph (Office action, 11/29/2006, page 5). Claims 1, 20, and 21 have been amended to overcome the 112 rejection. In particular, claims 1 and 21 have been amended to clarify "identifying related ions," and claim 20 has been amended to clarify "quantifying at least one ion".

VII. Double Patenting Rejections - 35 U.S.C. § 101

The Office Action states that claims 1, 20, 21, and 40 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claims 28 and 30 of co-pending U.S. Application No. 11/145,459, filed 2 June 2005 in view of U.S. Pat. Pub. No. 2004/0096982" (Office action, 11/29/2006, page 8). In the interest of cost, Applicants respectfully submit that a terminal disclaimer to overcome the provisional obviousness-type double patenting rejection will be forthcoming upon an indication of allowance of the claims.

CONCLUSION

In consideration of the foregoing analysis, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby respectfully requested. If it is determined that the application is not in a condition for allowance, the examiner is invited to initiate a telephone interview with the undersigned attorney at (770) 933-9500 to expedite prosecution of the present application.

Respectfully submitted,

/dr/

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